

PHARMACOLOGICAL REVIEWS

A Publication of the American Society for Pharmacology and Experimental Therapeutics

Louis S. Goodman, *Founding Editor, 1949*

Ross D. Feldman, *Editor*

Eric P. Brass, *Deputy Editor*

ASSOCIATE EDITORS

Stephen P. Alexander
Nottingham, United Kingdom
Jack Bergman
Belmont, Massachusetts
Annette Dolphin
London, United Kingdom
David Flockhart
Washington, DC
Bertil Fredholm
Stockholm, Sweden
Glenda E. Gillies
London, United Kingdom

Michael Gottesman
Bethesda, Maryland
Stephen D. Hall
Indianapolis, Indiana
Perry V. Halushka
Charleston, South Carolina
Paul A. Insel
La Jolla, California
Markku Koulu
Turku, Finland
Yoshihisa Kurachi
Kobe, Japan

Dan L. Longo
Baltimore, Maryland
Joaquin Madrenas
London, Canada
Mark P. Mattson
Baltimore, Maryland
Martin Michel
Amsterdam, The Netherlands
Theresa Shapiro
Baltimore, Maryland
Burt Sharp
Memphis, Tennessee

Daniel L. Simmons
Provo, Utah
Ulf Simonsen
Trige, Denmark
Adam Smith
Stockholm, Sweden
C. Michael Stein
Nashville, Tennessee
Per Marne Ueland
Bergen, Norway
Anton Wellstein
Washington, DC

ASPET BOARD OF PUBLICATIONS TRUSTEES

James E. Barrett, *Chair*; Jeffrey Conn, Ross D. Feldman, Lorraine J. Gudas, Eric F. Johnson, John S. Lazo, Edward T. Morgan, Richard R. Neubig, Rick G. Schnellmann, Darryle D. Schoepp, and Mary Vore

ASPET EXECUTIVE OFFICER: Christine K. Carrico

JOURNALS DIRECTOR: Richard Dodenhoff

MANAGING EDITOR: Jill Filler

Editorial supervision of *Pharmacological Reviews* is shared jointly with the **British Pharmacological Society** and the **Scandinavian Pharmacological Societies**.

Pharmacological Reviews (ISSN 0031-6997) is published quarterly in March, June, September, and December by the American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD 20814-3995; email: info@aspet.org; web site: www.aspet.org; journal web site: pharmrev.aspetjournals.org. Periodicals postage paid at Bethesda, MD, and at additional mailing offices. POSTMASTER: Send address changes to *Pharmacological Reviews*, 9650 Rockville Pike, Bethesda, MD 20814-3995. Subscription rates: U.S.: \$256.00 for institutions and \$145.00 for individuals. Outside the U.S.: \$301 for institutions and \$190 for individuals. Single copy: \$69.00. GST Tax Number for Canadian subscribers: BN:13489 2330 FT. Institutional and individual subscriptions include access to the online version of *Pharmacological Reviews* (pharmrev.aspetjournals.org).

Indexed or abstracted by: *Biological Abstracts*, *BIOSIS Previews Database*, *Biosciences Information Service*, *Current Contents®/Life Sciences*, *EMBASE/Excerpta Medica*, *Index Medicus*, *Index to Scientific Reviews®*, *Medical Documentation Service®*, *Reference Update®*, *Research Alert®*, *Science Citation Index®*, and *SciSearch®*.

ASPET office: 9650 Rockville Pike, Bethesda, MD 20814-3995; telephone: 301-634-7060; fax: 301-634-7061; email: info@aspet.org; web site: www.aspet.org.

Editorial matters should be addressed to Dr. Ross D. Feldman, Editor, *Pharmacological Reviews*, at the above address.

Official version: The online version of *Pharmacological Reviews* contains all of the information and material contained in the print version plus additional material that may not appear in print such as videos and large data sets. The online version may be more current than the print version. Where noted, the online version has been corrected in departure from the print version. The online version of *Pharmacological Reviews* officially published by the American Society for Pharmacology and Experimental Therapeutics is the definitive version and, to the extent any difference exists, will prevail over the print version.

Instructions to Authors: See pharmrev.aspetjournals.org for the Instructions to Authors and the ASPET Authorship Responsibility, Financial Disclosure, and Copyright Transfer form.

Subscriptions: Contact the ASPET Subscriptions Dept., 9650 Rockville Pike, Bethesda, MD 20814-3995; telephone: 301-634-7782; fax: 301-634-7061; email: subscriptions@aspet.org. For multi-site and consortia sales in Europe, contact: David Charles, eLicensing, 92 avenue du Général de Gaulle, 78600, Maisons-Laffitte, France; telephone: +33-1-39-12-29-29; fax: +33-1-39-12-47-45; email: dc.licensing@orange.fr.

Change of address: ASPET must be notified 60 days in advance. Copies undeliverable because of incorrect address will be destroyed. Duplicate copies may be obtained, if available, from ASPET at the single copy price. Send address changes to the ASPET office.

Issue replacement policy: *Domestic subscribers*—Claims for non-delivery of issues must be made within three (3) months of issue mail date. *Foreign subscribers*—Claims for nondelivery of issues must be made within six (6) months of issue mail date.

Missing Issues (domestic and foreign)—ASPET will not honor refunds or replacement requests made outside of the claim time period. Up to one (1) issue will be replaced free of charge per subscription year.

Reprints in large quantities for commercial or academic use may be purchased from ASPET. For information and prices, call 301-634-7063.

Copyright information: *Pharmacological Reviews* is copyrighted by the American Society for Pharmacology and Experimental Therapeutics. For permission to photocopy or use material electronically from *Pharmacological Reviews*, see www.copyright.com or contact the Copyright Clearance Center (CCC), Inc., 222 Rosewood Dr., Danvers, MA 01923; telephone: 978-750-8400. Photocopying of articles beyond that permitted by Sections 107 and 108 of the U.S. Copyright Law is allowed, provided that the \$20.00-per-copy fee is paid through the CCC. Classroom photocopying is permitted at no fee, provided that students are not charged more than the cost of duplication. This consent does not extend to other kinds of copying. Reproduction of any portion of an article for subsequent republication requires permission of ASPET. Write to the ASPET office at the above address. Requests should include a statement of intended use as well as explicit specifications of the materials to be reproduced.

Disclaimer: The statements and opinions contained in the articles of *Pharmacological Reviews* are solely those of the individual authors and contributors and not of the American Society for Pharmacology and Experimental Therapeutics. The appearance of advertisements in the journal is not a warranty, endorsement, or approval of the products or their safety. The American Society for Pharmacology and Experimental Therapeutics disclaims responsibility for any injury to persons or property resulting from any ideas or products referred to in any article or advertisement.

Copyright © 2009 by the American Society for Pharmacology and Experimental Therapeutics. All rights reserved. Printed in the U.S.A.